Atty. Dkt. No. 040373-0392

IAPS REC'S PCT/PTO 2 3 JUN 2006

Applicant:

Shuya KISHIMOTO, et al.

Title:

RADIO COMMUNICATIONS APPARATUS

Appl. No.:

Unassigned

International

12/03/2004

Filing Date:

371(c) Date:

06/23/2006

Examiner:

Unassigned

Art Unit:

Unassigned

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

Atty. Dkt. No. 040373-0392

IAP5 Rec'd PCT/PTO 23 JUN 2006

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the date of entry of the national stage as set forth in 37 CFR §1.491.

RELEVANCE OF EACH DOCUMENT

Document A1 is a U.S. counterpart of Document A5.

Document A2 is a U.S. counterpart of Document A7.

Document A3 is a U.S. counterpart of Document A9.

Document A4 relates to a mixer circuit which is suitable to be used for a selfheterodyne communication scheme to obtain a local oscillation signal and an RF signal of the same degree with great power.

The relevance of Documents A5, A6 and A8, listed on the attached PTO/SB/08, were cited as being relevant during the prosecution of the corresponding International application. A copy of the International Search Report is attached setting forth the portion of each document considered relevant by the examiner. An English translation of the foreign-language documents is not readily available; however, the absence of such a translation does not relieve the PTO from its duty to consider any submitted document (37 CFR §1.98 and MPEP §609). English language abstracts are attached.

The relevance of Documents A7 and A13 is described in the present specification.

Document A9 relates to a modulation system conversion circuit and optical signal transmitter in which a frequency band is made broad and a signal with high quality and small noise is transmitted.

10/584241

Atty. Dkt. No. 040373-0392 IAP5 Rec'd PCT/PTO 2 3 JUN 2006

Document A10 relates to an adaptive modulation type transmitter/receiver for TDD to adopt a propagation line condition estimating system with which the frame efficiency of information is adversely affected and the circuit scale of a reception equipment part is not expanded.

Document A11 relates to an image suppression mixer circuit in which deterioration in an image suppression ratio due to a phase error of an element is corrected and a sufficient image suppression ration is obtained over a wide band by compensating a frequency characteristic of the element.

Document A12 relates to a frequency converter for simultaneously providing the suppression of local power leak and the suppression of an image frequency signal.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

Date: June 23, 2006

FOLEY & LARDNER LLP Customer Number: 22428 Telephone: (202) 672-5407

Facsimile:

(202) 672-3407

(202) 672-5399

David A. Blumenthal

Attorney for Applicant

Registration No. 26,257

IAP5 Rec'd PCT/PTO 2 3 JUN 2006 MODIFIED PTO/SB/08 (08-00)

MODIFIED PTO/SB/08 (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control.

number.

	Substitute for for	rm 1449B/	РТО	Complete if Known			
\$	INFORMATION	DISCLO	SURE	Application Number	Unassigned III 501214		
	STATEMENT B	Y APPLI	CANT	Filing Date	June 23, 2006		
	Date Submitted:	Luna 22	2006	First Named Inventor	Shuya KISHIMOTO		
	Date Submitted.	. Julie 23,	2006	Group Art Unit	Unassigned		
	(use as many shee	ets as nec	cessary)	Examiner Name	Unassigned		
Sheet	1	of	1	Attorney Docket Number	040373-0392		

U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	U.S. Patent Document		N	Date of Publication of	Pages, Columns, Lines, Where Relevant		
		Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear		
	A1	2004/0114549	A1	MOYOSHI	06-17-2004			
	A2	6,826,234	B1	SHOJI et al.	11-30-2004			
	A3	5,896,216		KIKUSHIMA et al.	04-20-1999			

			UNPUBLISI	HED U.S. PATENT APPLICATION	DOCUMENTS		
Evernines	Cite No.1	U.S. Patent Application Document		Name of Patentee or Applicant of	Filing Date of	Pages, Columns, Lines, Where Relevant	
		Serial Number	Kind Code ² (if known)	Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	

				DREIGN PATENT DOCUMEN	. •		
Cite No. ¹			ocument Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
A4	JP	2004-166260	A	NEC CORP.	06-10-2004		Α
A5	JP	2003-218830	Α	MATSUSHITA ELECTRIC IND. CO. LTD.	07-31-2003		A
A6	JP	2003-198262	Α	MITSUBISHI ELECTRIC CORP.	07-11-2003		A
Α7	JP	2001-053640	Α	COMMUNICATION RESEARCH LAB. MPT	02-23-2001	VH.d	Α
A8	JP	2000-013246	Α	HITACHI LTD.	01-14-2000		Α
A9	JP	09-326769		NIPPON TELEGR & TELEPH CORP.	12-16-1997		Α
A10	JP	09-200282		KOKUSAI ELECTRIC CO.	07-31-1997		Α
A11	JP	08-125447		NEC CORP.	05-17-1996		A-
A12	JP	08-186449		NIPPON TELEGR & TELEPH CORP.	07-16-1996		Α
	A4 A5 A6 A7 A8 A9 A10 A11	No.1 Office A4 JP A5 JP A6 JP A7 JP A8 JP A9 JP A10 JP A11 JP	No.1 Office3 Number4 A4 JP 2004-166260 A5 JP 2003-218830 A6 JP 2003-198262 A7 JP 2001-053640 A8 JP 2000-013246 A9 JP 09-326769 A10 JP 09-200282 A11 JP 08-125447	No.1 Office3 Number4 Kind Code5 (if known) A4 JP 2004-166260 A A5 JP 2003-218830 A A6 JP 2003-198262 A A7 JP 2001-053640 A A8 JP 2000-013246 A A9 JP 09-326769 A A10 JP 09-200282 A A11 JP 08-125447 A	No. 1 Office3 Number 4 Kind Code (if known) Applicant of Cited Documents A4 JP 2004-166260 A NEC CORP. A5 JP 2003-218830 A MATSUSHITA ELECTRIC IND. CO. LTD. A6 JP 2003-198262 A MITSUBISHI ELECTRIC CORP. A7 JP 2001-053640 A COMMUNICATION RESEARCH LAB. MPT A8 JP 2000-013246 A HITACHI LTD. A9 JP 09-326769 NIPPON TELEGR & TELEPH CORP. A10 JP 09-200282 KOKUSAI ELECTRIC CO. A11 JP 08-125447 NEC CORP. A12 JP 08-186449 NIPPON TELEGR &	No. 1 Office 3 Number 4 Kind Code (if known) Applicant of Cited Documents MM-DD-YYYY A4 JP 2004-166260 A NEC CORP. 06-10-2004 A5 JP 2003-218830 A MATSUSHITA ELECTRIC IND. CO. LTD. 07-31-2003 A6 JP 2003-198262 A MITSUBISHI ELECTRIC CORP. 07-11-2003 A7 JP 2001-053640 A COMMUNICATION RESEARCH LAB. MPT 02-23-2001 A8 JP 2000-013246 A HITACHI LTD. 01-14-2000 A9 JP 09-326769 NIPPON TELEGR & 12-16-1997 A10 JP 09-200282 KOKUSAI ELECTRIC CO. 07-31-1997 A11 JP 08-125447 NEC CORP. 05-17-1996 A12 JP 08-186449 NIPPON TELEGR & 07-16-1996	No. 1 Office 3 Number 4 Kind Code (if known) Applicant of Cited Documents MM-DD-YYYY Passages or Relevant Figures Appear A4 JP 2004-166260 A NEC CORP. 06-10-2004 A5 JP 2003-218830 A MATSUSHITA ELECTRIC IND. CO. LTD. 07-31-2003 A6 JP 2003-198262 A MITSUBISHI ELECTRIC CO. CORP. 07-11-2003 A7 JP 2001-053640 A COMMUNICATION RESEARCH LAB. MPT 02-23-2001 A8 JP 2000-013246 A HITACHI LTD. 01-14-2000 A9 JP 09-326769 NIPPON TELEGR & 12-16-1997 12-16-1997 A10 JP 09-200282 KOKUSAI ELECTRIC CO. 07-31-1997 A11 JP 08-125447 NEC CORP. 05-17-1996 A12 JP 08-186449 NIPPON TELEGR & 07-16-1996

		NON PATENT LITERATURE DOCUMENTS	Vir.
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т ⁶
	A13	Y. SHOJI et al., "60 GHz Band 64QAM/OFDM Terrestrial Digital Broadcasting Signal Transmission by Using Millimeter-Wave Self-Heterodyne System," IEEE Transactions on Broadcasting, Vol. 47:3, September 2001, pp. 218-227.	

Examiner Date	
Signature Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the senal number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.